

What is claimed is:

1. A process for applying conductor tracks to the surface of a plastics molding, encompassing the steps of:
  - 5 a) using, as starting material, a molding with at least one plastics surface, where the molding comprises a structural foam with a solid outer skin and a cellular core, and comprises electrically conductive particles, their amount being such that the core is electrically insulating and the outer skin is electrically conductive, and
  - 10 b) ablating those portions of the plastics surface on which no conductor tracks are intended to run, with the aid of a selectively ablating process, so as to form a predetermined pattern of electrically non-conducting sections at the treated areas on the plastics surface, thus producing conductor tracks at the untreated areas on the surface.
2. The process as claimed in claim 1, wherein the selectively ablating process is selected from the group consisting of mechanical ablation processes, abrasive-blasting processes, electromechanical ablation processes, or treatment of the surface with electromagnetic radiation which is absorbed by the surface.
  - 20 3. The process as claimed in claim 2, wherein the electromagnetic radiation is selected from the group consisting of X-rays, infrared radiation, visible light, or UV radiation.
  4. The process as claimed in claim 3, wherein the electromagnetic radiation is laser radiation.
    - 25 30 35 4. The process as claimed in claim 1, wherein the molding used comprises a structural foam with solid outer skin and cellular core, the solid outer skin of which has a thickness of from 50 to 1000 µm, and the cellular core of which has a thickness of from 200 to 10 000 µm.
    6. The process as claimed in claim 1, wherein the molding used comprises a structural foam with a solid outer skin and with a cellular

core, the cellular core of which is a microcellular foam with cells whose size is in the range from 1 to 20  $\mu\text{m}$ .

7. The process as claimed in claim 1, wherein the core has a volume resistivity of more than  $10^7 \text{ ohm} \cdot \text{cm}$  and the outer skin has a volume resistivity of less than  $10^6 \text{ ohm} \cdot \text{cm}$ .
8. The process as claimed in claim 1, wherein the electrically conductive particles are selected from the group consisting of conductivity blacks, graphite powders, metal-coated graphite powders, carbon fibers, metal fibers, metal-coated carbon fibers, metal powders, or combinations of one or more of these components.
9. The process as claimed in claim 1, wherein the plastic is selected from the group consisting of liquid-crystalline polyesters, polybutylene terephthalate, homo- and copolyacetals, and polyphenylene sulfide, and mixtures of one or more of these.
10. A molding with at least one plastics surface obtainable by the process as claimed in claim 1, where the molding comprises a structural foam with a solid outer skin and a cellular core, and comprises electrically conductive particles, their amount being such that the core is electrically insulating and the outer skin is electrically conductive, where predetermined portions of the outer skin are present in the form of a conductor track pattern, and the other portions of the outer skin of the plastics surface have been ablated in such a way that at these areas a predetermined pattern of electrically non-conducting portions of the plastics surface has developed.
11. The use of structural foams comprising electrically conductive particles for producing components in which conductor tracks have been developed on predetermined portions of their surface.